

Work Order ID 115860

April-04-14 10:23:29 AM

115860

Page 1

Item ID: D3619-2

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Grommet

Start Date: 4/04/14 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 4/04/14 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: *R* Date: *1404-7*
QC: _____ Date: _____

Tooling: _____ Date: _____

Run Start ***NR1***

SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3619	Rev A

100

100

Purchasing

PURCHASING

Memo

Purchasing

Issue P/O: *23691* Purchase Part Number: 9610K18Supplier: MC
MASTER CARRCcertificate of conformity is required

0.00

0.00

R 14-04-7

110

110

Packaging

Receive & Inspect for Damage & Mat'l Certs

0.00

Packaging

Memo

Ensure material certification is attached

0.00

R 14-04-7

120

120

QC

QC6- Inspect dimensions to drawing

0.00

Quality Control

Memo

0.00

DAS
27
9-69
M/4/19

1

DQA: _____ Date: _____

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS									
Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>				Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>		Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>		Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>		Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>					
Root Cause		Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector			
Design															
Doc/Data															
Equip/Tooling															
Handling/Pre															
Material															
Operator															
Offset/Setup															
Process															
Supplier															
Training															
Transport															
Unapproved															
FAULT CATEGORY															
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function				<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence				<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
<input type="checkbox"/> Other															

Work Order ID 115860

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Page 2

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N900040100

Setup

Start

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Cust Item ID:

Required Date: 4/04/14 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run

Start

NR1

QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

*****Remove supplier paperwork from box.***** Identify and
StockLocation: ST058

130

130

Packaging

Packaging

Memo

Packaging

140

140

QC

QC21- Final Inspection - Work Order Release

Quality Control

Memo

1X DAS
28 9-89 APR 09 201414/4/10 84/4/10

DQA: _____ Date: _____

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Suspected Unapproved				<input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is	<input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab	<input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite	<input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging	<input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other			
Root Cause		Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved											
FAULT CATEGORY											
Landing Gear			General								
Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube			Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function			Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence			Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge		
									Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled		
									Other		

Picklist Print

Page 1

April-04-14 10:23:28 AM

Work Order ID: 115860

115860
D3619-2

Parent Item: D3619-2

Parent Item Name: Grommet

Start Date: 4/04/14

Required Date: 4/04/14

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A New Issue 07-04-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
9610K18		Purchased	No			110	Each	0.0000	1	1			**

9610K18

GROMMET

4/4/14/SC

DQA: _____ Date: _____



QA Closed: _____ Date: _____

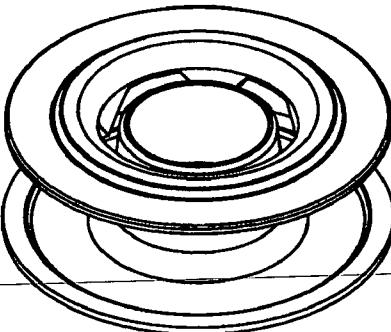
Work Order update only

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order: _____ Part No. _____ NCR No. _____			DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>						
Root Cause	Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Design											
Doc/Data											
Equip/Tooling											
Handling/Pre											
Material											
Operator											
Offset/Setup											
Process											
Supplier											
Training											
Transport											
Unapproved											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function			<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence			<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge			<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

DART

DESIGN <i>CE</i>	DRAWN BY <i>CE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>PH</i>	APPROVED <i>✓</i>	DRAWING NO. D3619
DATE 07.03.26		TITLE GROMMET
REV A	DATE 07.03.26	SCALE NTS 115860 P140417



RELEASED
07 04 02

D3619-X GROMMET,
WHERE X REPRESENTS THE GROMMET TRADE SIZE

DART P/N	TRADE SIZE	DESCRIPTION	HOLE SIZE	MAX. MTL THICKNESS	MCMASTER CARR P/N
D3619-0	0	BRASS GROMMET W/ TEETH	1/4	0.110	9610K16
D3619-1	1	BRASS GROMMET W/ TEETH	9/32	0.120	9610K17
D3619-2	2	BRASS GROMMET W/ TEETH	3/8	0.150	9610K18
D3619-3	3	BRASS GROMMET W/ TEETH	7/16	0.230	9610K19
D3619-4	4	BRASS GROMMET W/ TEETH	1/2	0.300	9610K21

NOTES:

1) PURCHASE INFO: MCMASTER-CARR P/N'S INCLUDE THE FOLLOWING:

48 GROMMETS FOR SIZE 0 & 1,
24 GROMMETS FOR SIZE 2, 3 & 4,
D3619-XT1 HOLE PUNCH,
D3619-XT2 STRIKER BLOCK,
D3619-XT3 PUNCH AND
D3619-XT4 DIE

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO23691

Purchase Order Date 4/7/2014

PO Print Date 4/7/2014

Page Number 1 of 2

Order From : VU-MCM001
MCMASTER-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name _____
Vendor Phone 330 995 5500

Ship To Contact _____
Ship To Phone _____
Ship Via: FedEx PI colle
Ship Acct: _____

Buyer	Brigitte Golden
Customer POID	
Customer Tax #	10127-2607
Terms	Net 10
Currency	USD
FOB	FCA – (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
Line Comments		Promise Date					
Delivery Comments							
	6605K56	HOOK AND LOOP TIE	4/9/2014	Yes	20.00 Each	\$2.78	\$55.56
	AS PER DWG:D3551 REV:A B115605		4/9/2014				
	9610K18	GROMMET	4/9/2014	Yes	1.00 Each	\$13.31	\$13.31
	AS PER DWG:D3619 REV:A B115860		4/9/2014				
	95606A170	Washer	4/9/2014	Yes	20.00 Each	\$0.09	\$1.72
	AS PER DWG: D3631 REV:A B115800		4/9/2014				

Note:

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO23691

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Order Placed By
Chantal Lavoie

04/08/2014

McMaster-Carr Number
2247546-01

LNS A8

Line	Description	Ordered	Shipped			
1	6605K56 Hook and Loop Cable Tie, Black Flame-Retardant Wrap Around, 24" L, 3/4" Width, Packs of 5 Your Part Number: AS PER DWG:D3551 REV:A B115605	4 Packs	4	3 - 125 - 11	43 - 39	K56 4PK
	Unit Price: \$13.89 Extended Price: \$55.56			1	1	315
	9610K18 Military Specification Grommet Kit, with Teeth Washer, Trade Size 2, 3/8" ID, 24 Grommets Your Part Number: AS PER DWG:D3619 REV:A B115860	1 Each				
	Unit Price: \$13.31 Extended Price: \$13.31					

Dart Aerospace Ltd

EXP
INV
NAF



4
4 tir

Lg

38x12x12

FW1BSP
04/08/20
08:12:10:
437
Cycle 26

1141079418129

